CLAIMS

What is claimed is:

1. A method for detecting an increased risk for developing an inflammatory disorder in a mammal, comprising detecting the presence of at least one copy of an IL-1β gene haplotype comprising cytosine nucleotides at positions -31 and +3953 in said mammal, wherein the presence of said at least one copy of the IL-1 gene haplotype indicates that said mammal has an increased risk for developing said inflammatory disorder.

2. The method as defined in claim **1** wherein said mammal has two copies of said IL-1β gene haplotype.

3. The method as defined in claim **1** wherein said mammal is a human being.

4. The method as defined in claim **1** wherein said IL-1β gene haplotype further comprises a thymidine nucleotide at position -511.

5. The method as defined in claim **1** wherein said inflammatory disorder is selected from the group consisting of coronary artery disease, osteoporosis, nephropathy in diabetes mellitus, alopecia areata, Graves' disease, systemic lupus erythematosus, lichen sclerosis, ulcerative colitis, periodontal disease, juvenile chronic arthritis, chronic iridocyclitis, psoriases, insulin dependent diabetes, diabetic complications, diabetic retinopathy, atherosclerosis, Crohn's disease, rheumatoid arthritis, osteoarthritis, congestive heart failure, and a neurodegenerative disease.

6. A method for detecting a mammalian patient who requires an increased dosage of an agent that reduces the effect of IL-1β comprising detecting the presence of at least one copy of an IL-1β gene haplotype comprising cytosine nucleotides at positions -31 and +3953 in the patient, wherein the presence of at least one copy of the IL-1β gene haplotype indicates that the patient requires a dosage of the agent to reduce the effect of IL-1β in the patient that is higher than the dosage of the agent required to reduce the effect of IL-1β in a second mammal who does not have said at least one copy of the IL-1β haplotype.

7. The method as defined in claim **6** wherein said mammalian patient having at least one copy of the IL-1β gene haplotype has two copies of the IL-1β gene haplotype.

8. The method as defined in claim **6** wherein said mammalian patient is a human being.

9. The method as defined in claim **6** wherein said mammalian patient and said second mammal are of the same species.

10. The method as defined in claim **6** wherein said IL-1β gene haplotype further comprises a thymidine nucleotide at position -511.

11. The method as defined in claim **6** wherein said inflammatory disorder is selected from the group consisting of coronary artery disease, osteoporosis, nephropathy in diabetes mellitus, alopecia areata, Graves' disease, systemic lupus erythematosus, lichen sclerosis, ulcerative colitis, periodontal disease, juvenile chronic arthritis, chronic iridocyclitis, psoriases, insulin dependent diabetes, diabetic complications, diabetic retinopathy, atherosclerosis, Crohn's disease, rheumatoid arthritis, osteoarthritis, congestive heart failure, and a neurodegenerative disease.

12. A kit for detecting an increased risk of developing an inflammatory disorder in a mammal, comprising a first set of PCR primers for amplifying a first DNA sequence comprising the nucleotide at position -31 of an IL-1β gene, a second set of PCR primers for amplifying a second DNA sequence comprising the nucleotide at position +3953 of the IL-1β gene; and instructions for determining the presence of at least one copy of an IL-1β gene haplotype comprising cytosine nucleotides at positions -31 and +3953 in said mammal based on the size of the PCR products.

13. The kit as defined in claim **12** wherein said mammal having at least one copy the IL-1β gene haplotype comprising cytosine nucleotides at positions -31 and +3953 has two copies of the IL-1β gene haplotype.

14. The kit as defined in claim **12** wherein said mammal is a human being.

15. The kit as defined in claim **14** wherein said inflammatory disorder is selected from the group consisting of coronary artery disease, osteoporosis,

nephropathy in diabetes mellitus, alopecia areata, Graves' disease, systemic lupus erythematosus, lichen sclerosis, ulcerative colitis, periodontal disease, juvenile chronic arthritis, chronic iridocyclitis, psoriases, insulin dependent diabetes, diabetic complications, diabetic retinopathy, atherosclerosis, Crohn's disease, rheumatoid arthritis, osteoarthritis, congestive heart failure, and a neurodegenerative disease.

16. The kit as defined in claim **12** further comprising a third set of primers for amplifying a third DNA sequence comprising the nucleotide at position -511 of the IL-1β gene and instructions for determining the presence of a copy of an IL-1β gene haplotype comprising cytosine nucleotides at positions -31 and +3953 and a thymidine nucleotide at position -511 in said mammal based on the size of the PCR products.